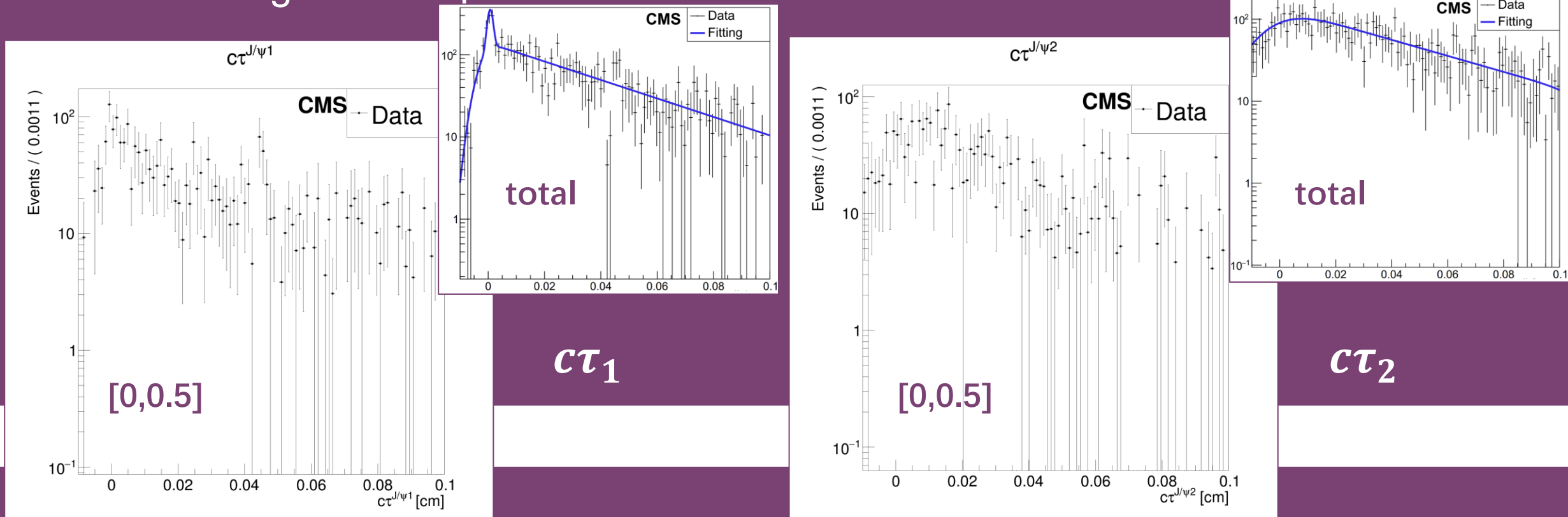




# Difference of samples in different bins

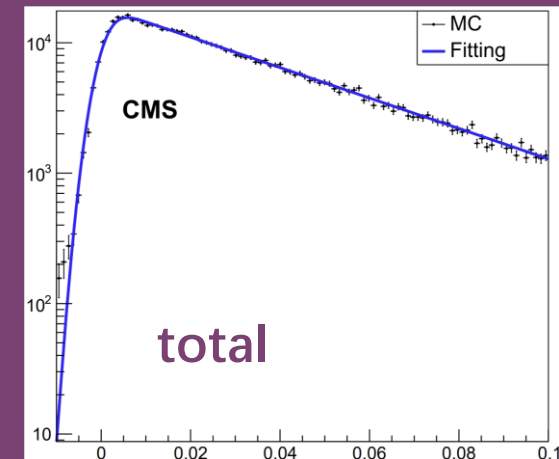
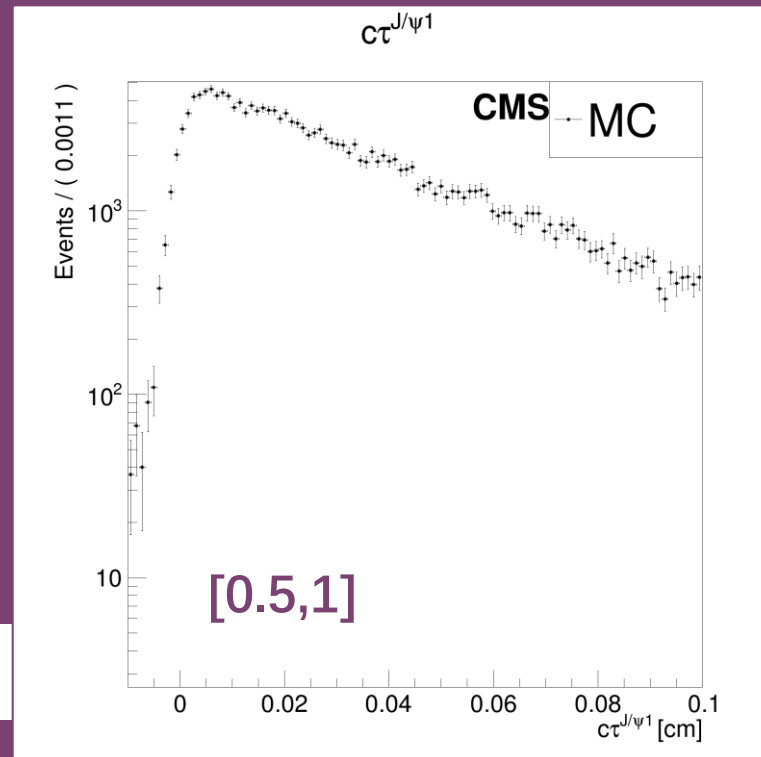
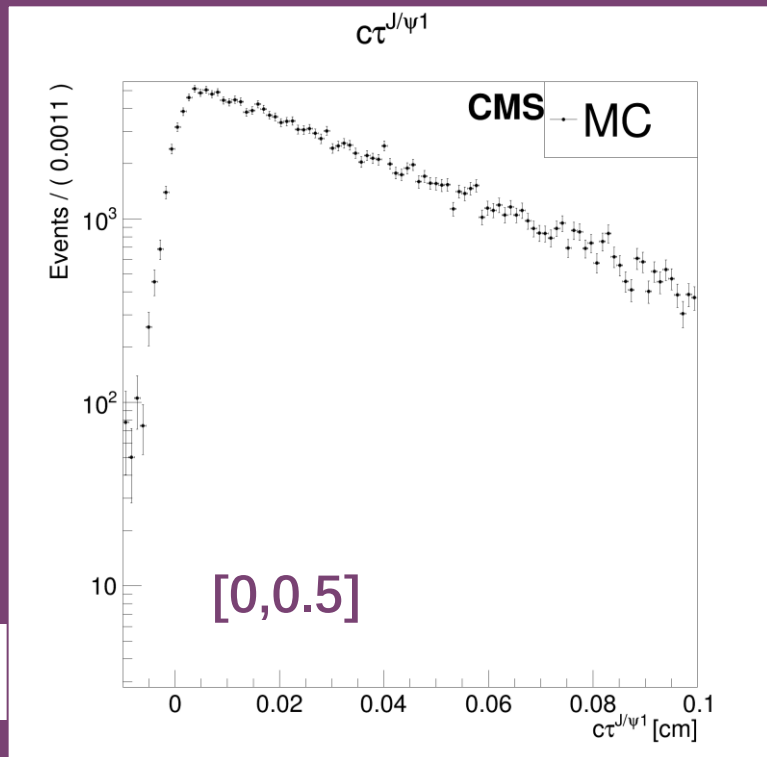
- We checked the shape of samples (MC/sideband) in different bins
- For different  $\Delta y$  bins
  - No dramatic difference can be noticed for data side band
  - Although the shapes are blurred





# Difference of samples in different bins

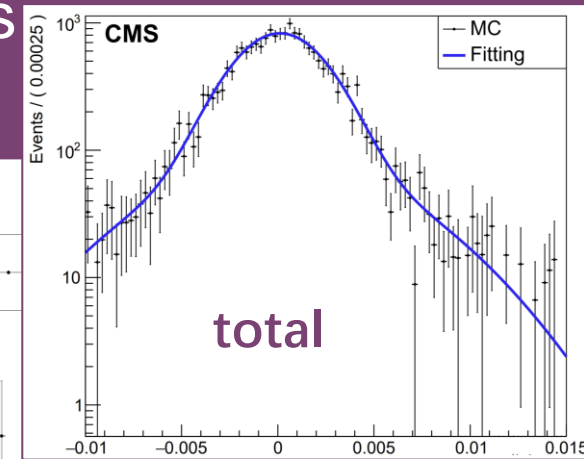
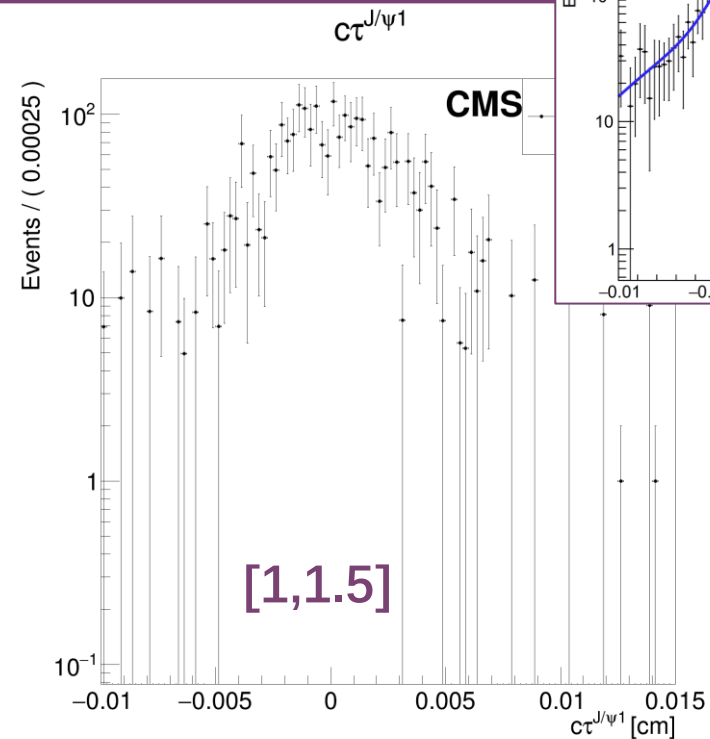
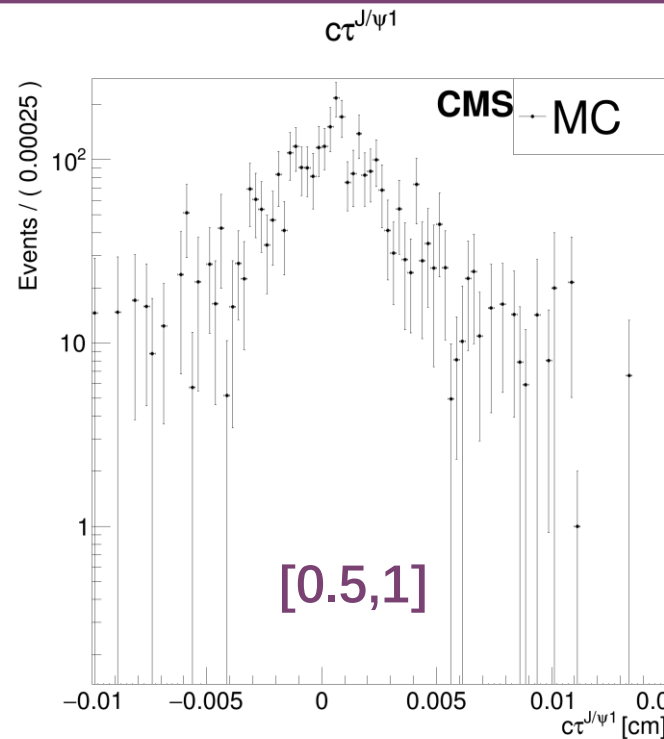
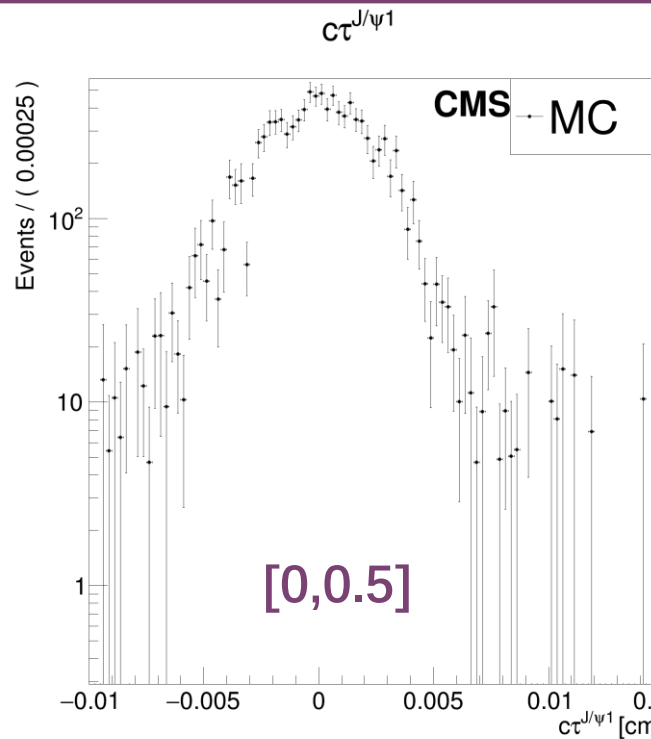
- For different  $\Delta y$  bins
  - Almost no difference can be noticed for non-prompt MC





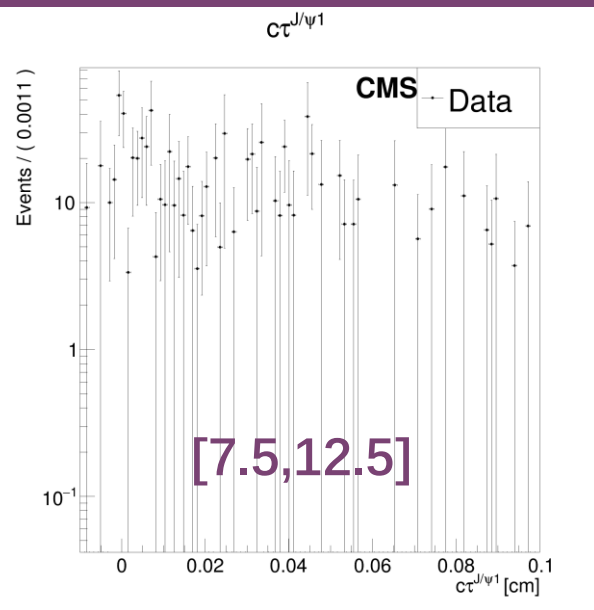
# Difference of samples in different bins

- For different  $\Delta y$  bins
  - Difference in the shape for prompt MC sample can be found
  - May come from different SPS/DPS fraction in different bins

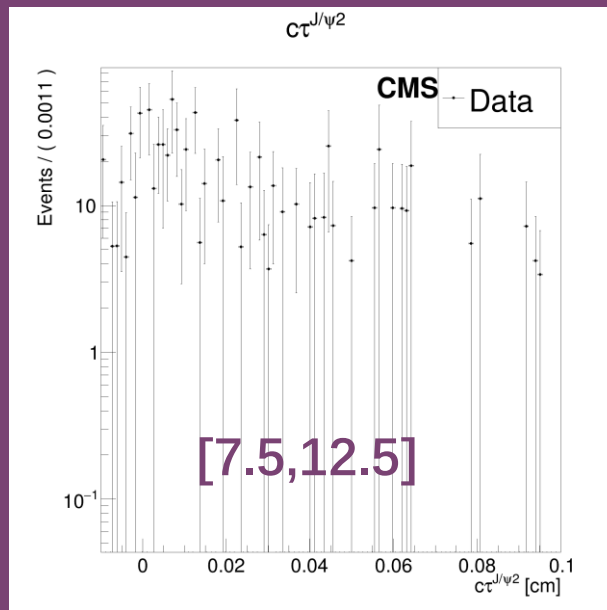


# Difference of samples in different bins

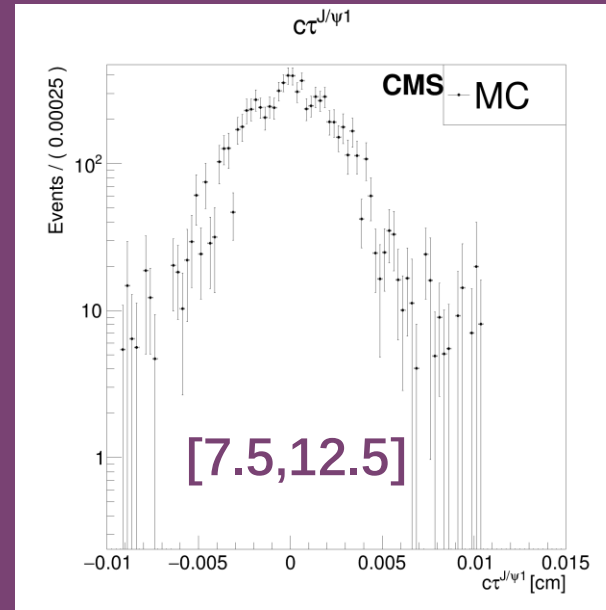
- For different  $M(J/\psi J/\psi)$  bins
  - Similar for prompt MC and side band sample



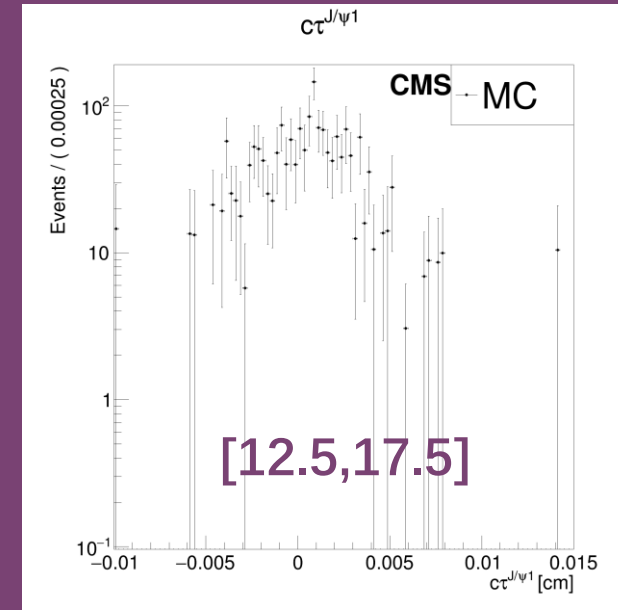
Side band  $c\tau_1$



Side band  $c\tau_2$



Prompt MC  $c\tau_1$





# Difference of samples in different bins

- For different  $M(J/\psi J/\psi)$  bins
  - Almost nothing for non-prompt MC sample in the first two bins

